IN THE ABSTRACT

Please delete the abstract currently on file and replace with the following new abstract:

--The invention relates to a device useful for non-invasive detection of the properties of a medium by means of interferometry. The device comprises an optical source which is used for illuminating a zone of the medium that is to be probed with a light beam, and an interferometer for splitting the light beam into a reference beam and a probe beam. The interferometer has a cutoff frequency for the automatic control of respective path lengths of the reference beam and of the probe beam. The device also comprises scanning means which, together with the probe beam, are used to scan the zone to be probed at an image acquisition frequency greater than the cutoff frequency.--